

REMARKS

Claims 1-14 and 17-20 are pending, and claims 1-14 and 17 are under consideration, which is respectfully requested.

REJECTION OF CLAIMS 1-14 AND 17 UNDER 35 U.S.C. § 103(a) AS BEING UNPATENTABLE OVER NAKAGAWA ET AL. (US 2004/0157978; WO 02/0094936) IN VIEW OF KUSANO ET AL. (US 5,616,652)

The Examiner cites Nakagawa et al. as disclosing compositions containing all of the claimed components. The Examiner cites paragraph [0105] of Nakagawa et al. as disclosing a polyamide/carbon master batch. The Examiner asserts Kusano et al. discloses a styrenic block copolymer (SBC) with a bulk density of 0.18 or higher. However, the rejection is based on a mistaken identification.

Kusano et al. discloses adding material to PPO and/or polyamide. See column 7, line 34. However, the "PPO" in Kusano et al. stands for polypropylene oxide, which is definitely different from the polyphenylene ether described in the present invention. In no part of Kusano et al. is polyphenylene ether mentioned. Accordingly, Kusano et al. does not teach the use of SBC on a polyphenylene ether/polyamide composition.

The Examiner states the goals of Kusano et al. include "improved handling, ability to absorb softener, more thorough mixing and higher productivity." The Examiner cites Kusano et al., column 2, lines 5-10 for this proposition. This excerpt discloses benefits of improved handling, high capability to absorb softener, and thorough melting upon mixing. "Higher productivity" is not disclosed in this portion, or in any other part of the reference, and it is unclear as to what is meant by "handling" as it is used in the reference. One would not have combined Kusano et al. with Nakagawa et al. for the purpose of increasing productivity at the feed. Indeed, the examples of Kusano et al. only measure "handling property of crumbs after the absorption of oil" (Tables 1 and 2). It is unclear how Nakagawa et al. would be combined with these oil absorption teachings.

The goals of Kusano et al. mentioned by the Examiner (improve processing, i.e. improved handling, higher capability to absorb a softener, and thorough melting upon mixing) are very different from minimizing variations in the impact strength of a polyamide/polyphenylene ether resin composition by using a certain packed bulk density range. The technical objects are apparently very different.

Accordingly, Kusano et al. belongs to a technical field different from where a polyphenylene ether/polyamide composition belongs. Accordingly, it is groundless to reject the present invention by combination of these two references.

The Examiner also admits that Nakagawa et al. does not disclose an SBC having the packed bulk density of claim 1. For this deficiency, the Examiner cites the bulk density measurement process in Kusano et al. and argues that the Kusano et al. process would inherently pack the SBC (column 8, lines 33-44). However, a closer reading shows that the claimed packed bulk density is completely missing from Kusano et al.

The Examiner asserts that Kusano et al. packs the hydrogenated block copolymer. Column 8, lines 33-42 describe dropping from a height of 3 cm. This appears to be closer to the aerated process described in paragraph [0037] of the application. The packed process described in paragraph [0035] also involves vibrating.

Even if a person of ordinary skill in the art would have attempted to modify Nakagawa et al. based on Kusano et al., Kusano et al. merely indicates that the bulk density should be higher than 0.18. It does not disclose any maximum limit. However, claim 1 clearly recites 0.25 as a maximum limit. This maximum limit relates to the stability of physical properties. Paragraph [0036] of the application states, "Packed bulk density of higher than 0.25 g/cm³ is not preferred because a hydrogenated block copolymer is likely to produce blocking in a feeder hopper, which makes it difficult to stably feed the copolymer, leading to large variations in physical properties thereof in the same lot." There is no such description in Kusano et al. regarding an upper limit

Kraton G1651 is a general hydrogenated block copolymer. Based on the teachings of Kusano et al., it appears that Kraton G1651 could have been used with the Kusano et al. process. However, Kraton G1651 has a bulk density of 0.279, outside of the claimed range. As described in the present application, if one attempts to use a hydrogenated block copolymer such as Kraton G1651, problems are produced. See tables 1-6, which compare the performance of Kraton G1651 with hydrogenated block copolymers having lower packed bulk densities.

Accordingly, an obviousness rejection can not be based on Nakagawa et al. in view of Kusano et al. and allowance of independent claim 1 and dependent claims 2-14 and 17 is respectfully requested.

**REJECTION OF CLAIMS 1-14 AND 17 UNDER 35 U.S.C. § 103(a) AS BEING
UNPATENTABLE OVER KUSANO ET AL. (US 5,616,652) IN VIEW OF MIYOSHI ET AL. (US
2003/0139518)**

The Examiner asserts that the goal of Kusano et al. is to improve processes in which macromolecular materials are melt blended with SBC, especially processes using PPO or polyamides. The Examiner asserts that it would have been obvious to add the non-SBC components of Miyoshi et al. to Kusano et al. "since doing so would improve the process of the secondary reference as described by the primary reference absent any showing of surprising or unexpected results." Applicants traverse the rejection as follows.

First, one of the primary reasons the Examiner believes the combination would have been obvious is because Kusano et al. strongly prefers materials containing PPO or polyamides. Miyoshi et al. does not relate to PPO.

Second, the Examiner asserts that it would have been obvious to add the non-SBC components of Miyoshi et al. to Kusano et al. to "improve the process of the secondary reference." However, it is not clear which process this hypothetical combination will be using. It appears the Examiner has cited Kusano et al. because the Examiner believes Kusano et al. discloses a good process. It is not clear how using the components of Miyoshi et al. in Kusano et al. could possibly improve the process of Miyoshi et al. Perhaps the Examiner is intending to use the components described in the Kusano et al. process in the Miyoshi et al. process. In this case, perhaps the Examiner could make an argument that the Miyoshi et al. process would be improved. However, the claimed invention would not result. Moreover, the extent it can be understood, the combination proposed by the Examiner uses the process described in the Kusano et al., not the process disclosed in Miyoshi et al. Because the process of Miyoshi et al. is no longer being used, it makes no sense to say that the combination improves the process of Miyoshi et al. The Examiner has provided no logical reason as to why one of ordinary skill in the art would have combined the references.

Third, even if one attempted to combine Kusano et al. and Miyoshi et al., the claims require a packed bulk density of 0.15 to 0.25 grams g/cm³. As described above, Kusano et al. does not teach an upper limit for the range. Miyoshi et al. does not compensate for this deficiency.

Accordingly, an obviousness rejection can not be based on Kusano et al. in view of Miyoshi et al. and allowance of independent claim 1 and dependent claims 2-14 and 17 is respectfully requested.

CONCLUSION

Thus, it is believed that all rejections have been removed, and the present application is now in condition for allowance.

Reconsideration and early favorable action on the claims are earnestly solicited.

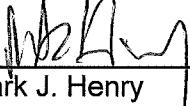
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: 

Mark J. Henry
Registration No. 36,162

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501